

Product datasheet for **RC200773**

TGF beta induced factor 2 (TGIF2) (NM_021809) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | TGF beta induced factor 2 (TGIF2) (NM_021809) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | TGF beta induced factor 2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC200773 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGACAGTGATCTAGGTGAGGACGAAGGCCTCCTCTCCCTGGCGGGCAAAGGAAGCGCAGGGGGA
ACCTGCCCAAGGAGTCGGTGAAGATCCTCCGGACTGGCTGTACTTGCACCGCTACAACGCCTACCCCTC
AGAGCAGGAGAAGCTGAGCCTTTCTGGACAGACCAACCTGTCAGTGCTGCAAATATGTAAGTGGTTCATC
AATGCCCGGGGGGCTTCTCCAGACATGCTTCGGAAGGATGGCAAAGACCCTAATCAGTTTACCATT
CCCGCCGGGGGTAAGGCCTCAGATGTGGCCCTCCCCGTGGCAGCAGCCCTCAGTGTGGCTGTGTC
TGTCACGCCCCCAACAATGTGCTCTCCCTGTCTGTGTGCTCCATGCCGCTTCACTCAGGCCAGGGGAA
AAGCCAGCAGCCCTTTCCACGTGGGAGCTGGAGTCTCCCAAGCCCTGGTGACCCCTGGTAGCACAC
TACTCTGCTGACCAGGCTGAGGCTGGAAGCCCCACAGGTGGACTCTTCAACACGCCACCACCCACACC
CCCAGAGCAGGACAAAGAGGACTTCAGCAGCTTCCAGCTGCTGGTGGAGGTGGCGCTACAGAGGGCTGCT
GAGATGGAGCTTCAAGCAGCAGGACCCATCACTCCATTACTGCACACTCCCATCCCTTTAGTCTCTG
AAAATCCCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200773 protein sequence
Red=Cloning site Green=Tags(s)

MSDSDLGEDEGLLSLAGKRKRRGNLPKESVKILRDWLYLHRYNAYPSEQEKL SLSGQTNLSVLQICNWF I
 NARRRLLPDMLRKDGKDPNQFTISRGGKASDVALPRGSSPSVLAVSVPAPT NVLSL SVCSMPLHSGQGE
 KPAAPFPERGELESPKPLVTPGSTLTLL TRAEAGSPTGGLFNTPPP TPPEQDKEDFSSFQLLVEVALQRAA
 EMELQKQQDPSLPLLHTPIPLVSEN PQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6565_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021809

ORF Size: 711 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_021809.7](#)

RefSeq Size: 3415 bp

RefSeq ORF: 714 bp

Locus ID: 60436

UniProt ID: [Q9GZN2](#)

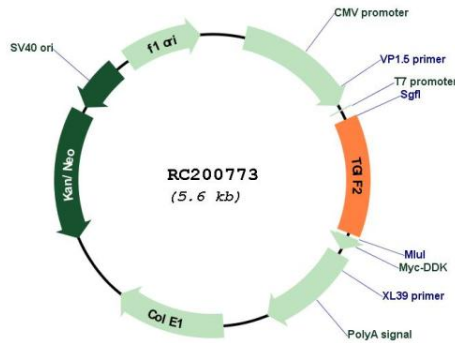
Cytogenetics: 20q11.23

Protein Families: Transcription Factors

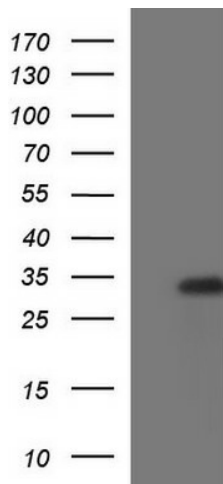
MW: 25.9 kDa

Gene Summary: The protein encoded by this gene is a DNA-binding homeobox protein and a transcriptional repressor, which appears to repress transcription by recruiting histone deacetylases to TGF beta-responsive genes. This gene is amplified and over-expressed in some ovarian cancers. Alternative splicing results in multiple transcript variants. A related pseudogene has been identified on chromosome 1. Read-through transcription also exists between this gene and the neighboring downstream C20orf24 (chromosome 20 open reading frame 24) gene. [provided by RefSeq, Dec 2010]

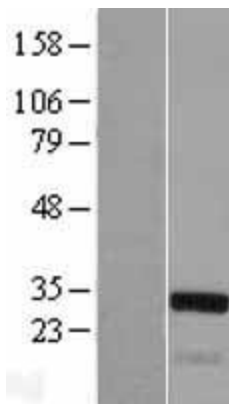
Product images:



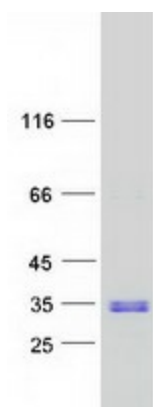
Circular map for RC200773



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TGIF2 (Cat# RC200773, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TGIF2 (Cat# [TA590467]). Positive lysates [LY411916] (100ug) and [LC411916] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411916]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200773 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TGIF2 protein (Cat# [TP300773]). The protein was produced from HEK293T cells transfected with TGIF2 cDNA clone (Cat# RC200773) using MegaTran 2.0 (Cat# [TT210002]).